

What is claimed is:

1. A mold for molding a tire, comprising:

at least two sub-molds being capable of forming a predetermined form as a whole when used for molding a tire,

5 characterized in that said mold is equipped with said at least two sub-molds each of which has a plural number of air removal apertures for discharging air from blockades formed between said green tire and sub-molds when a green tire is pressed on respective surfaces of said sub-molds during tire molding, and a plurality of ventlids; each of which has a lid mechanism; and said lid mechanism being made of a flexible, and chemically inactive material without fusing with said green tire, and being capable of using repeatedly at a temperature of 100-200 °C, discharging air from blockades with keeping an open state (by spring up) until said green tire contacts (an upper ^{when?} portion of the mold) when said green tire is pressed on respective surfaces of said sub-molds during tire molding, continuing to discharge air (while reducing degree of its spring up) during a period from a time when said green tire contacts said upper portion to a time when it reaches the surface of said sub-molds, and preventing a green tire from flowing out of the ventlids by forming a closed state where the ventlids are intimately contact with said green tire (by dissolving its springing up) when said green tire reaches the surfaces of said sub-molds.

25 2. A mold for molding a tire according to Claim 1,

wherein said ventlid is a flexible plate member and the lid mechanism of said ventlid passes through the direction of

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the thickness of said ventlid; said ventlid being formed by bending upwardly at a predetermined angle a cut portion cut along with a baseline formed by a straight line linking a starting point and an end point both of which are a starting point(s) and an end point(s) of one or more straight or curved cuts and do not coincide each other.

3. A mold for molding a tire according to Claim 1,

wherein said lid mechanism is disposed with a means of positioning to prevent further pressing downwards after formation of a closed state where the ventlids are intimately contact with said green tire by dissolving its springing up at a time when said green tire reaches the surfaces of said sub-molds.

4. A mold for molding a tire according to Claim 3,

wherein said means of positioning is a positioning pin disposed in a standing form in direction of the central axis of said venthole so as to make an upper portion thereof contact intimately with said lid mechanism in a closed state by means of a support member provided in said venthole.

5. A mold for molding a tire according to Claim 3,

wherein said means of positioning is a positioning structure where diameter of said venthole is set to be small so as to make a leading edge of said lid mechanism contact with an upper portion of the peripheral wall of said venthole when said lid mechanism is a closed state.

6. A mold for molding a tire according to Claim 1,

wherein said ventlid is a flexible plate member, and said

lid mechanism of said ventlid is formed by bending at a predetermined angle cut portions which are cut along with a baseline formed from one or more cuts which are formed from one or more continuous or non-continuous straight or curved lines.

5 7. A mold for molding a tire according to Claim 6,

wherein said ventlid is fixed in a vent tube by fixing a weld side by using as a boundary said cuts formed through direction of the thickness at a predetermined location of said sub-molds, and said vent tube where said ventlid is fixed is disposed in said venthole.

10 8. A mold for molding a tire according to Claim 6,

wherein said ventlid is directly fixed by fixing a weld side by using as a boundary said cuts formed with passing through direction of the thickness at a predetermined location of said sub-molds.

15 9. A mold for molding a tire according to Claim 1,

wherein said ventlid is made of a lens-shaped flexible plate member where two circles or ellipses are lay in a line, and said lid mechanism of said ventlid is formed by bending at a predetermined angle as a baseline of a joint portion where the two aforementioned circles or ellipses are lay in a line.

20 10. A mold for molding a tire according to Claim 9,

wherein said ventlid is fixed in a vent tube at a predetermined location with respect to one plate member of said plate members that are bent; said vent tube where said ventlid is fixed being disposed in said venthole.

25 11. A mold for molding a tire according to Claim 9,

wherein said ventlid is directly fixed by fixing one plate member among said bent plate members at its predetermined location to a predetermined location of said sub-molds.

12. A mold for molding a tire according to Claim 9,

5 wherein said ventlid is made of a keyhole-shaped flexible plate member where a circle, ellipsis or shell-shape, and rectangular shape are lay in a line, and said lid mechanism of said ventlid is formed by bending the flexible plate at a predetermined angle as a baseline a line formed by said circle, ellipsis or shell-shape and said rectangular shape or a straight line positioned at the proximity of said line.

13. A mold for molding a tire according to Claim 12,

wherein said ventlid is fixed by embedding directly said rectangular plate member among said bent plate members into a predetermined location of said sub-molds to fix .

14. A mold for molding a tire according to Claim 1,

wherein said ventlid is fixed to said sub-molds by fixing said rectangular plate member among said bent plate members at its predetermined location to sipe blades disposed in predetermined locations of said sub-molds.

15. A mold for molding a tire according to Claim 1,

wherein said ventlid is made of a flexible plate member whose shape is composed of a shape corresponding to design of a shape of the periphery of a tire and a rectangular shape in series, and said lid mechanism of said ventlid is formed by bending the flexible plate at a predetermined angle using as a baseline a portion where the design of the shape of the

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periphery of a tire and a rectangular shape are lay in a line.

16. A mold for molding a tire according to Claim 15,

wherein said ventlid is fixed to a vent tube at a predetermined location of said rectangular plate member among said bent plate members, and said vent tube to which said ventlid is fixed is housed in said venthole.

17. A mold for molding a tire according to Claim 15,

wherein said ventlid is a ventlid in which a predetermined location of said rectangular plate member among said bent plate members is directly fixed in a predetermined location of said sub-molds.

18. A mold for molding a tire according to Claim 6,

wherein a plate member capable of opening and closing among said bent plate members is made of a plate member having a surface shape corresponding to the surface shape of said sub-molds.

19. A mold for molding a tire according to Claim 18,

wherein a plate member capable of opening and closing among said bent plate members is a plate member to which a shaped component having a surface shape corresponding to the surface shape of said sub-molds is fixed.

20. A mold for molding a tire according to Claim 1,

wherein said ventlid is made of a silicone elastomer or a fluorocarbon elastomer.